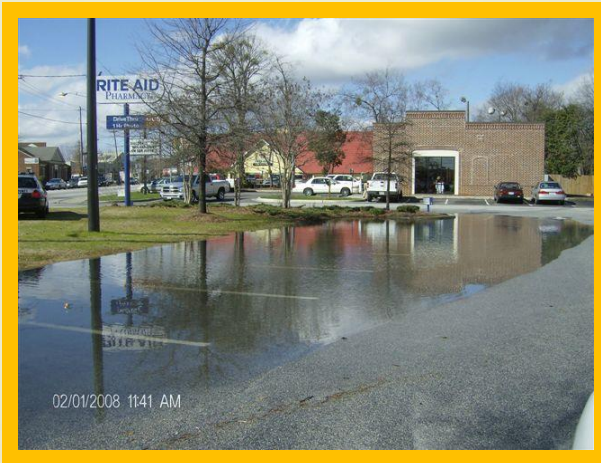


CITY OF AUGUSTA, GA



STORMWATER IMPLEMENTATION PHASE II

MAJOR REASONS FOR AUGUSTA, GA TO IMPLEMENT A STORMWATER UTILITY

1. Improved Response to Augusta Customer Requests.
2. Compliance with Augusta's Stormwater Permit.
3. Rehabilitation of Failing Infrastructure.
4. Maintenance of the Municipal Stormwater Conveyance System.
5. Implementing Watershed Master Plan.

AUGUSTA CURRENT STORMWATER MANAGEMENT LEVEL OF SERVICE (LOS)

LEVEL OF SERVICE (LOS)		PROGRAM MANAGEMENT ACTIVITIES	NPDES COMPLIANCE ACTIVITIES		CAPITAL IMPROVEMENT PROJECTS
			NON OPERATION & MAINTENANCE COMPLIANCE ACTIVITIES	OPERATION & MAINTENANCE PROGRAM ACTIVITIES	
A	5	Comprehensive Planning + Full Implementation Capabilities	Exemplary Permit Compliance	Fully Preventative/100% Routine	10-year Plan
B	4	Proactive Planning + Systematic CIP Implementation Capabilities	Proactive Permit Compliance	Mixture of Routine and Inspection Based	20-year Plan
C	3	Priority Planning + Minimal CIP Implementation Capabilities	Minimal Permit Compliance	Inspection Based	40-year Plan
D	2	Reactionary Planning + Minimal CIP Implementation Capabilities	Below Minimum Permit Compliance	Responsive Only (Complaint-based)	50-year Plan
F	1	No Planning + No CIP Implementation Capabilities	Non-Compliance	Less than Full Response to all Complaints	75-year Plan (No Plan)

AUGUSTA CURRENT SCORE :

1.75

D-

PRE-STORMWATER FEE:

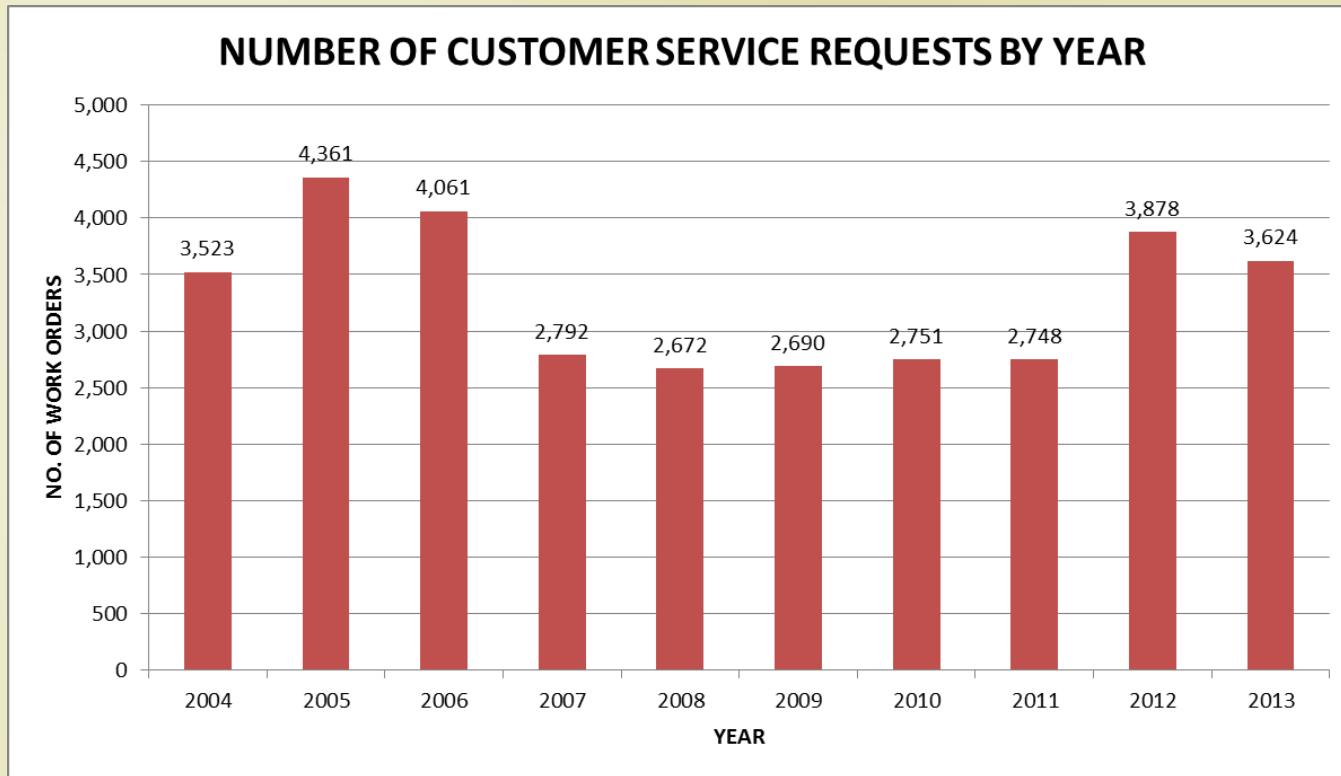
SOURCE: Level of Service (LOS) Chart – Southeastern Stormwater Association (SESWA) and CDM Smith

AUGUSTA PLANNED STORMWATER MANAGEMENT LEVEL OF SERVICE (LOS)

LEVEL OF SERVICE (LOS)		PROGRAM MANAGEMENT ACTIVITIES	NPDES COMPLIANCE ACTIVITIES		CAPITAL IMPROVEMENT PROJECTS
			NON OPERATION & MAINTENANCE COMPLIANCE ACTIVITIES	OPERATION & MAINTENANCE PROGRAM ACTIVITIES	
A	5	Comprehensive Planning + Full Implementation Capabilities	Exemplary Permit Compliance	Fully Preventative/100% Routine	10-year Plan
B	4	Proactive Planning + Systematic CIP Implementation Capabilities	Proactive Permit Compliance	Mixture of Routine and Inspection Based	20-year Plan
C	3	Priority Planning + Minimal CIP Implementation Capabilities	Minimal Permit Compliance	Inspection Based	40-year Plan
D	2	Reactionary Planning + Minimal CIP Implementation Capabilities	Below Minimum Permit Compliance	Responsive Only (Complaint-based)	50-year Plan
F	1	No Planning + No CIP Implementation Capabilities	Non-Compliance	Less than Full Response to all Complaints	75-year Plan (No Plan)
AUGUSTA PROPOSED SCORE:		4.50	B+		
POST-STORMWATER FEE:					

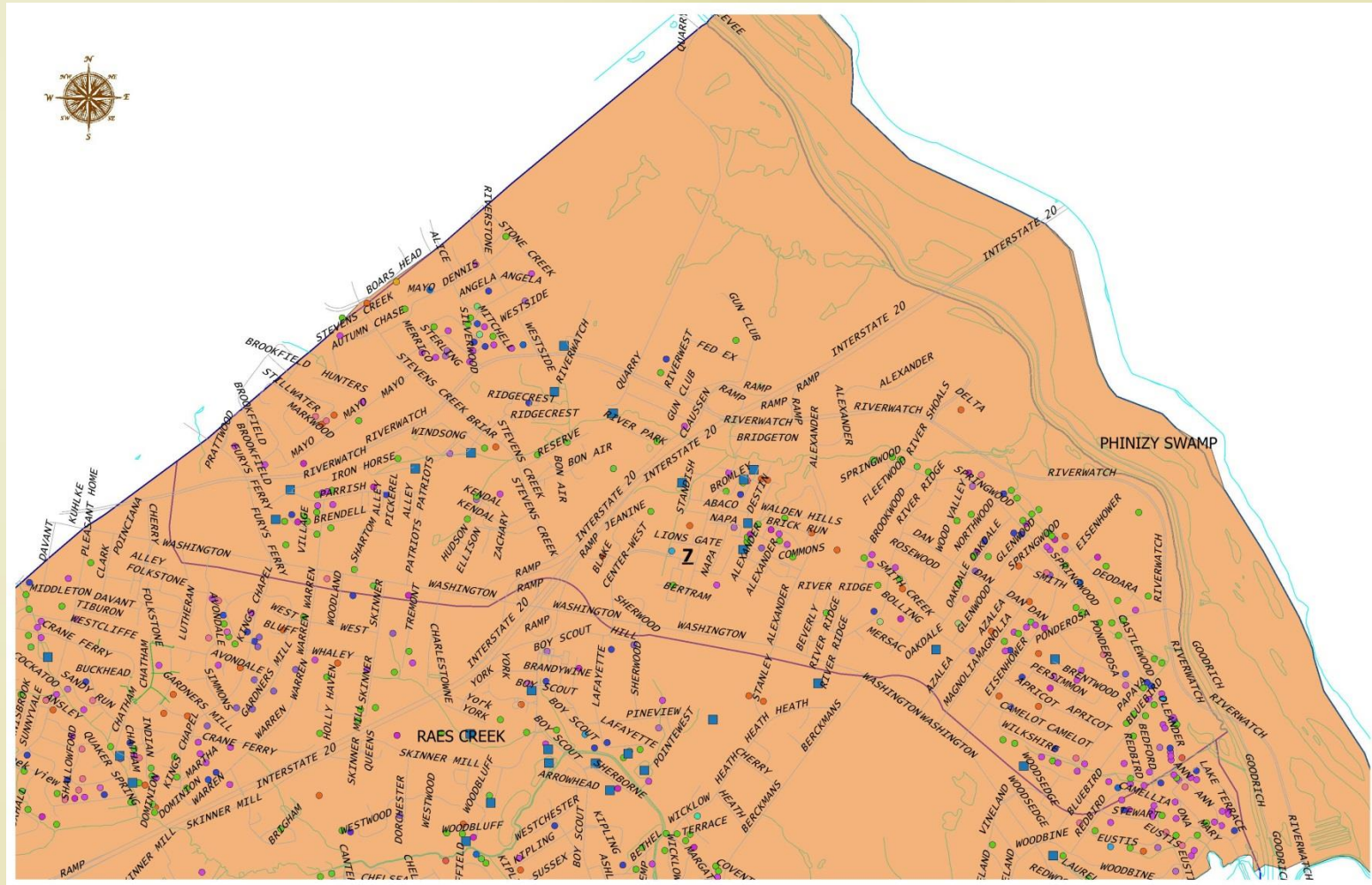
SOURCE: Level of Service (LOS) Chart – Southeastern Stormwater Association (SESWA) and CDM Smith

STORMWATER RELATED MAINTENANCE WORK ORDERS



- Work Orders are Reactive.
- The Department has Completed 68% of the Work Orders with 3% being completed by Contractors.
- The Goal of the Program is to become Proactive.
- Larger Projects Require Contractors and no Funds are Available. This is included in the 32% of Requests that are not Completed.

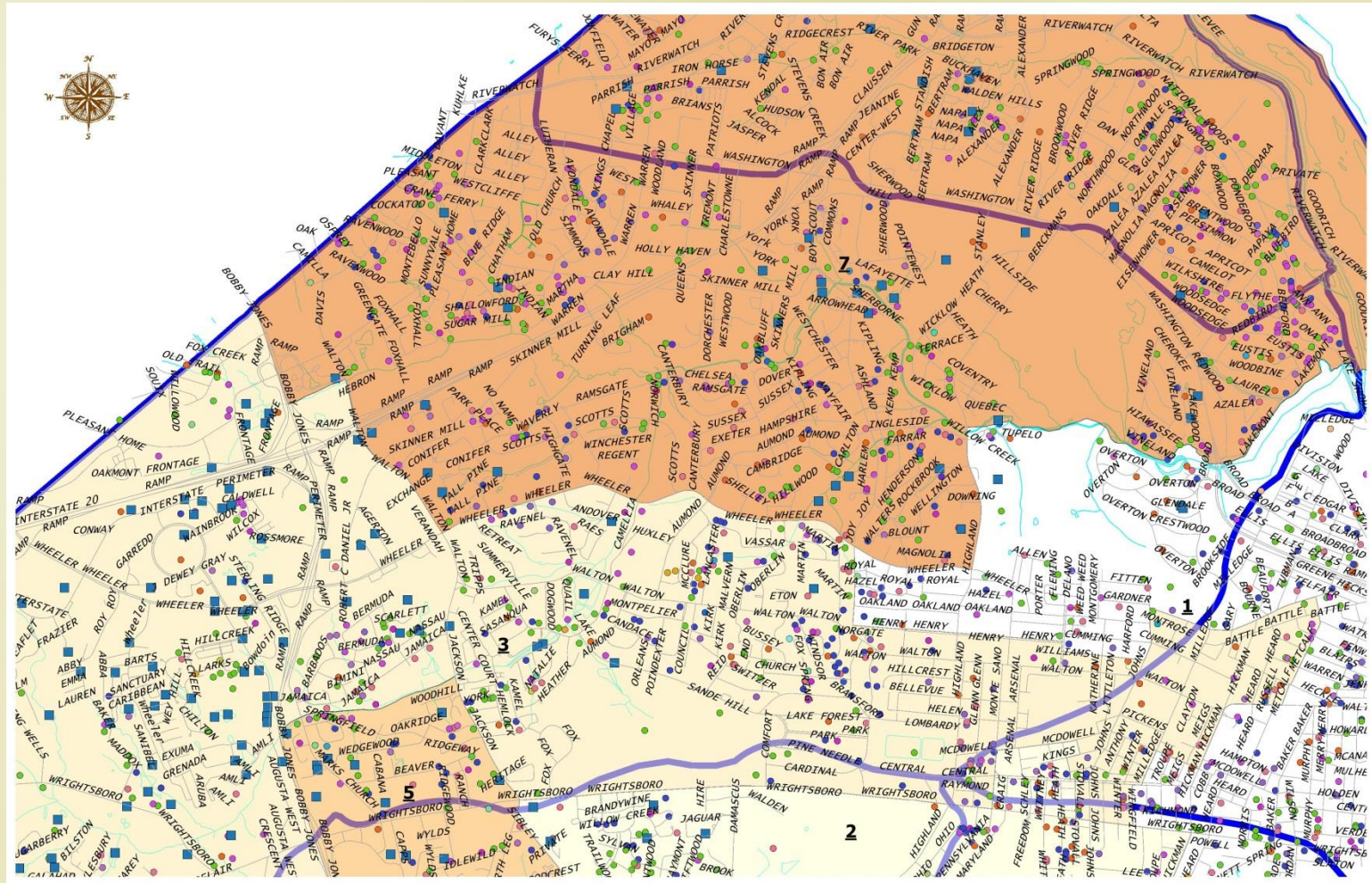
RAES AND ROCK CREEK WATERSHED WORK REQUESTS AND DETENTION PONDS



ROCK CREEK WATERSHED TYPICAL DEFECTS



RAES CREEK WATERSHED WORK REQUESTS AND DETENTION PONDS



RAES CREEK WATERSHED TYPICAL DEFECTS



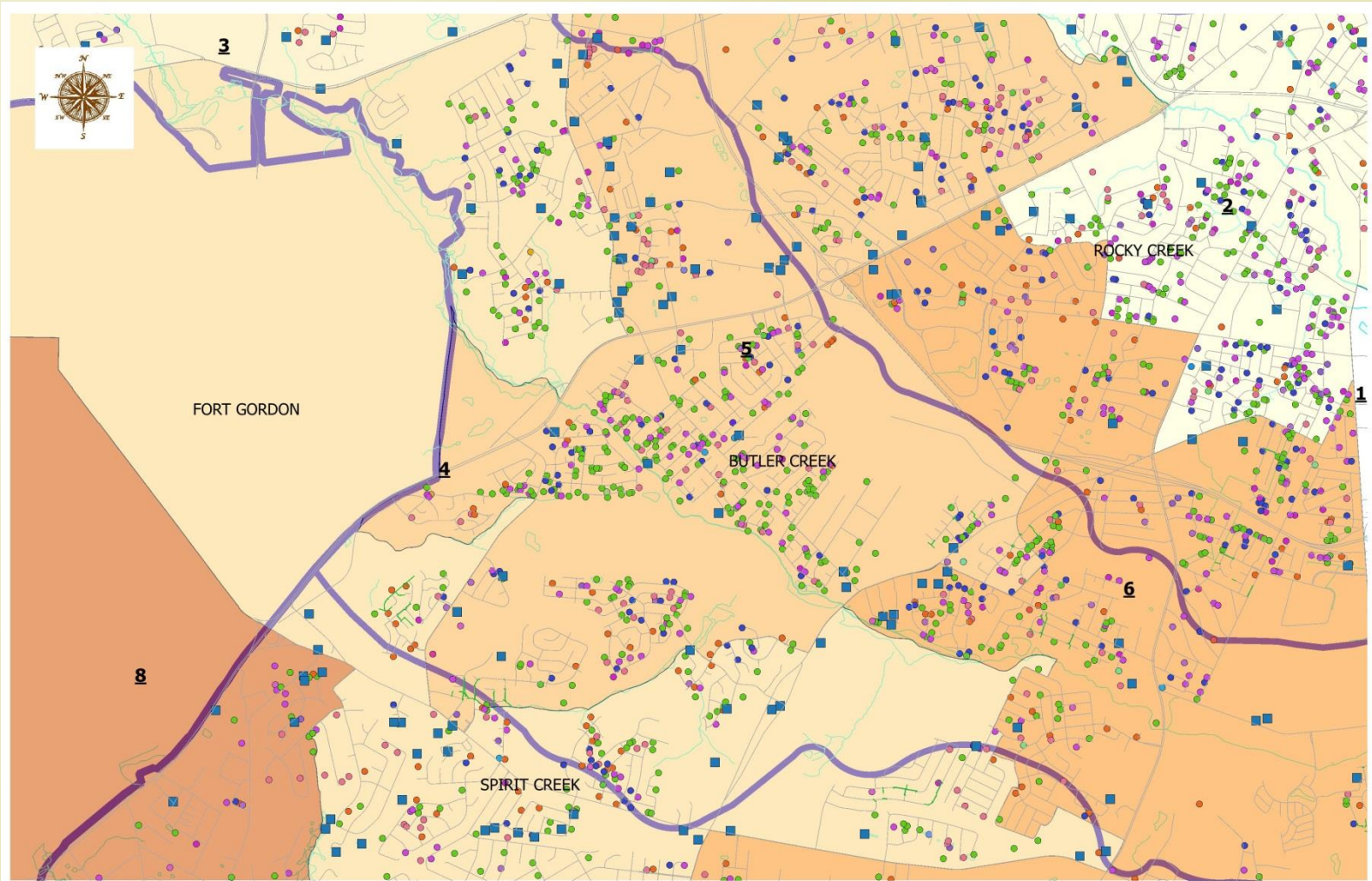
OATES CREEK AND PHINIZY SWAMP WATERSHED WORK REQUESTS AND DETENTION PONDS



OATES CREEK AND PHINIZY SWAMP WATERSHEDS TYPICAL DEFECTS



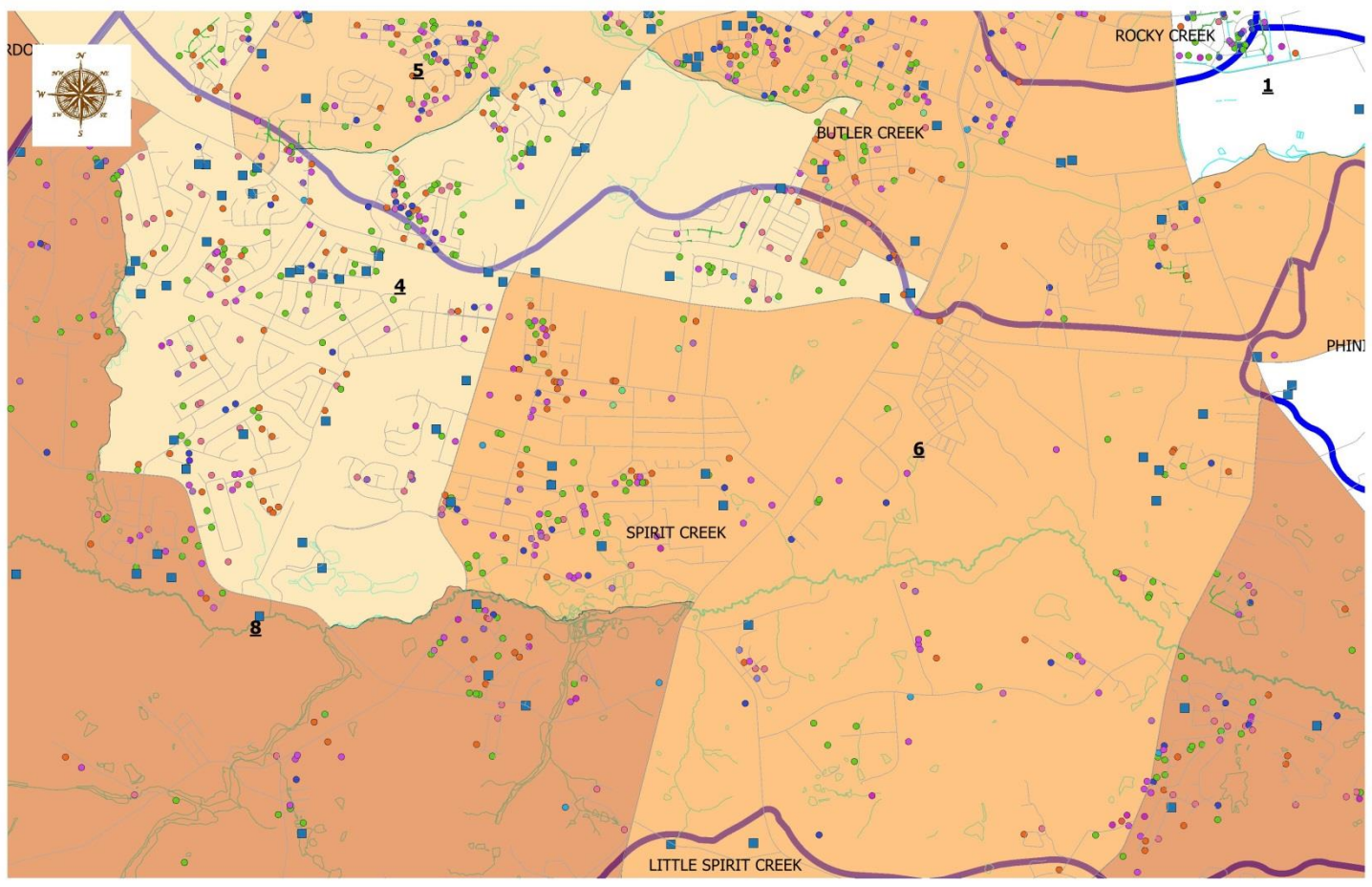
BUTLER CREEK WATERSHED WORK REQUESTS AND DETENTION PONDS



BUTLER CREEK WATERSHED TYPICAL DEFECTS



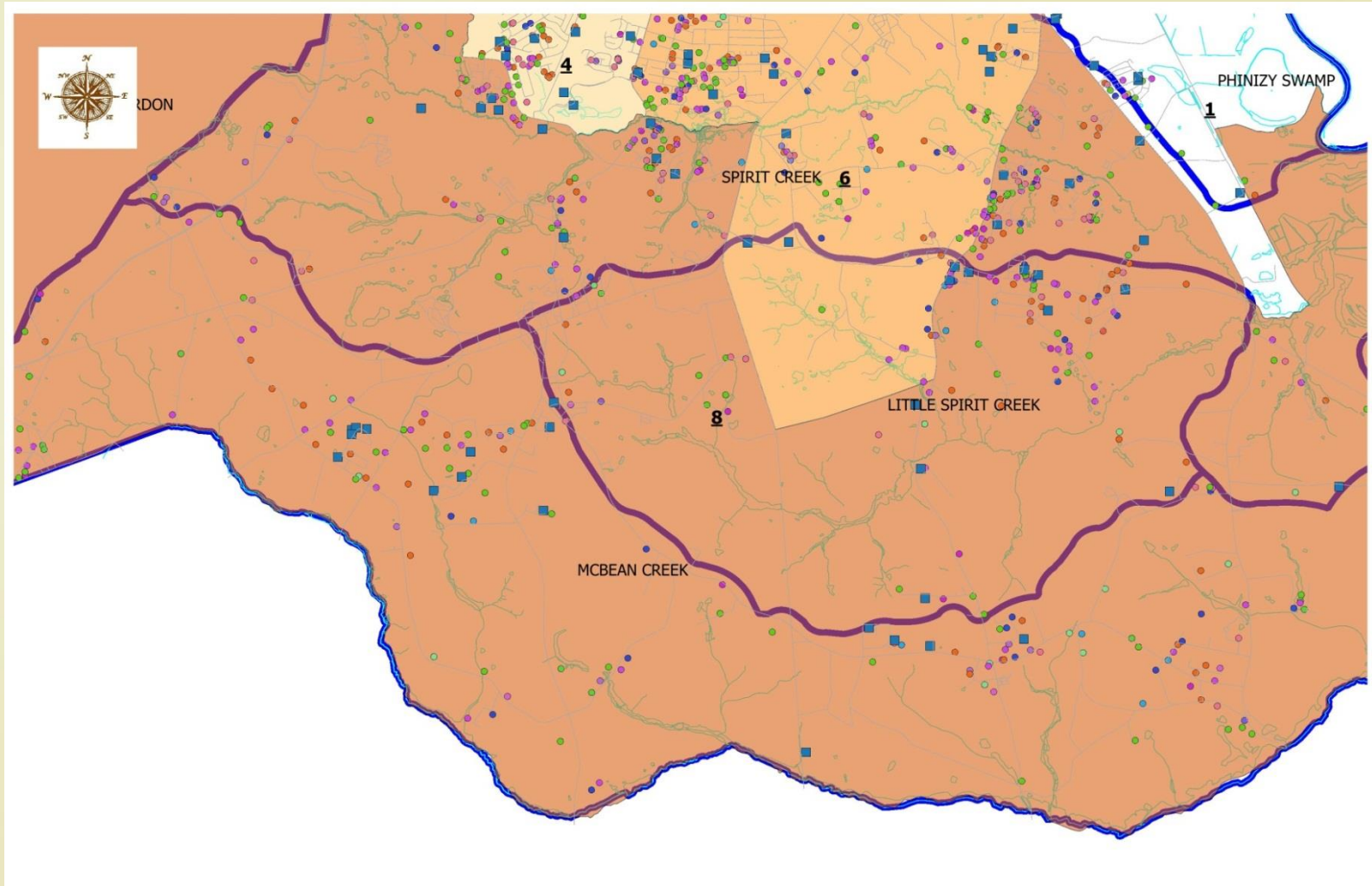
SPIRIT CREEK WATERSHED WORK REQUESTS AND DETENTION PONDS



SPIRIT CREEK WATERSHED TYPICAL DEFECTS



LITTLE SPIRIT, SPIRIT, AND McBEAN CREEK WATERSHEDS WORK REQUESTS AND DETENTION PONDS



FEE DETERMINATION

	PROGRAM YEARS					
	DESCRIPTION	1	2	3	4	5
PROGRAM COST	Labor	\$2,870,000	\$3,070,000	\$3,340,000	\$3,550,000	\$3,630,000
	Non-Labor	\$2,810,000	\$2,960,000	\$3,310,000	\$3,440,000	\$3,560,000
	Consulting/Contracting	\$3,910,000	\$4,710,000	\$4,710,000	\$4,360,000	\$4,260,000
	Flood + CIP + Equipment	\$7,040,000	\$5,950,000	\$6,970,000	\$6,620,000	\$7,570,000
	Billing + Indirect Cost Allocation	\$426,000	\$426,000	\$426,000	\$4,260,000	\$426,000
	Additional CIP/Debt	\$0	\$0	\$500,000	\$1,000,000	\$1,500,000
	SUB-TOTAL:	\$17,056,000	\$17,116,000	\$19,256,000	\$23,230,000	\$20,946,000
REVENUE REDUCTIONS	Bad Debt	\$762,808	\$762,808	\$762,808	\$762,808	\$762,808
	Credits	\$305,123	\$305,123	\$305,123	\$305,123	\$305,123
	SUB-TOTAL:	\$1,067,931	\$1,067,931	\$1,067,931	\$1,067,931	\$1,067,931
OTHER REVENUE	NPDES	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
	SPLOST Buyout	\$0	\$0	\$0	\$0	\$0
	SPLOST CIP	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000
	Other SPLOST	\$0	\$0	\$0	\$0	\$0
	SUB-TOTAL:	\$5,015,000	\$5,015,000	\$5,015,000	\$5,015,000	\$5,015,000
	REVENUE REQUIREMENT:	\$13,108,931	\$13,168,931	\$15,308,931	\$19,282,931	\$16,998,931
STORMWATER FEE	ERUs:	198,915	198,915	198,915	198,915	198,915
	FEE RECEIVED:	\$6.40	\$6.40	\$6.40	\$6.40	\$6.40
ESTIMATED REVENUE GENERATED	FEE REVENUE:	\$15,276,672	\$15,276,672	\$15,276,672	\$15,276,672	\$15,276,672
	PROPERTY CATEGORY		NUMBER OF PROPERTIES	NUMBER OF ERUs		
	Single Family Residential - Low Tier (1)		57,809	57,809		
	Single Family Residential - Medium Tier (2)		9,488	18,976		
	Single Family Residential - High Tier (3)		1,356	4,068		
	Non-Single Residential		2,169	118,062		
		TOTAL:	70,822	198,915		

FEE DETERMINATION

$$\text{MONTHLY FEE} = \frac{\text{TOTAL PROGRAM COSTS}}{\text{\# OF BILLING UNITS}} = \$6.40 \text{ per ERU per Month}$$

NON-RESIDENTIAL STORMWATER MONTHLY FEE ESTIMATES

CHURCHES

90% of Churches has less than **11 ERUs**. This is Equivalent to less than **\$70.40/Month**

3% of Churches fall between **11 and 15 ERUs**. This is Equivalent to less than **\$100/Month**

6% of Churches fall within the **\$500/Month** Range.

1% of Churches Fees would Range between **\$685 to \$1,400/Month**.

COMMERCIAL BUSINESSES

Neighborhood Businesses (B-1): **Average = \$23/Month**

General Businesses (B-2): **Average = \$61/Month**

Professional (P-1): **Average = \$26/Month**

NON-RESIDENTIAL STORMWATER CREDITS FOR DETENTION FACILITY – 40%, WATER QUALITY – 15%, AND INDUSTRY GENERAL WATER PERMIT – 5%

40% Credit for Detention Facilities are Equivalent to a cost of **\$3.84** per **2,200 SF**

55% Credit for Detention Facilities and Water Quality is Equivalent to a cost of **\$2.88** per **2,200 SF**

60% Credit for Detention Facilities, Water Quality, and Industry General Water Permit is Equivalent to a cost of **\$2.56** per **2,200 SF**.

63% of the 100 Top Payers possibly have Detention Ponds.

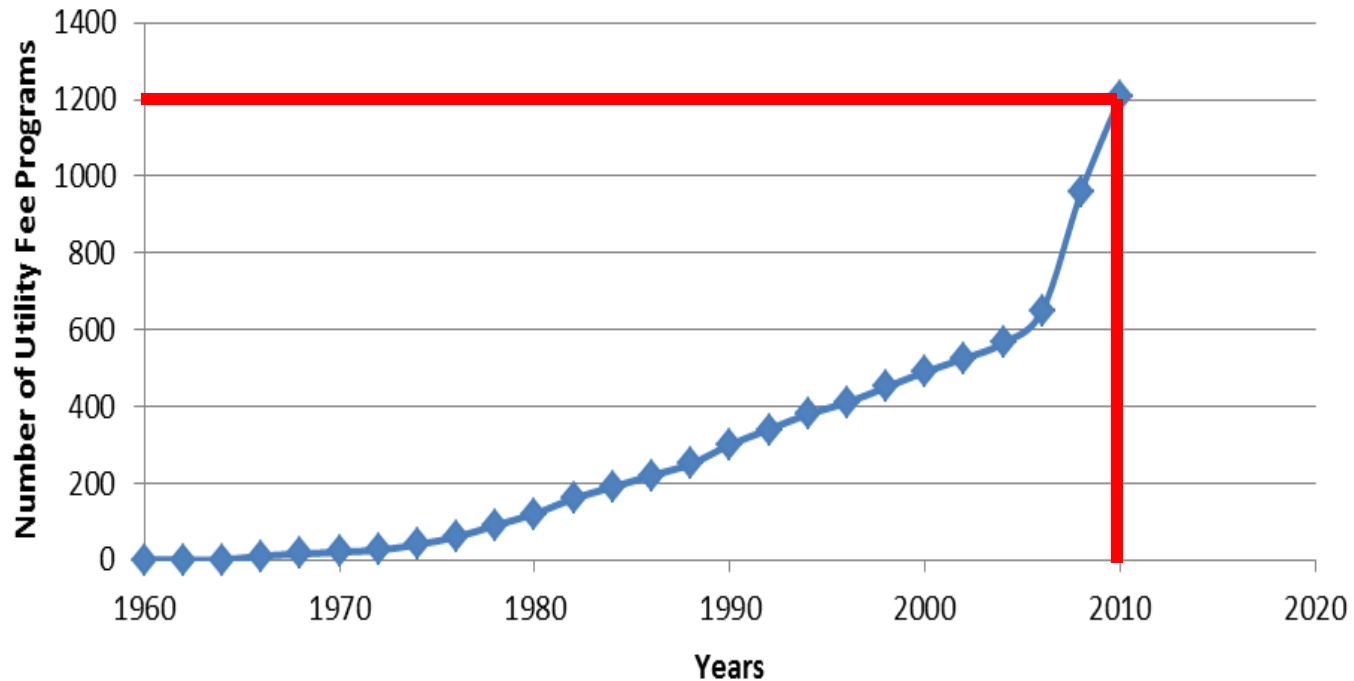
STORMWATER PROJECTS THAT CAN POSSIBLY BE BONDED

NO.	PROJECTS	ESTIMATED COST
1	East Augusta Roadway and Drainage Improvements (8 phases)	\$18,000,000
2	Hyde Park/Wilkinson Gardens Street and Drainage Improvements	\$14,000,000
3	Forest Hills Drainage Improvements	\$25,000,000
4	National Hills Area Streets and Drainage Improvements	\$10,000,000
5	Rocky Creek Flood Hazard Mitigation	\$14,650,000
	PROPOSED STORMWATER PROJECTS TO BOND:	\$81,650,000

OTHER BENEFITS FOR IMPLEMENTING A STORMWATER FEE IN AUGUSTA, GA

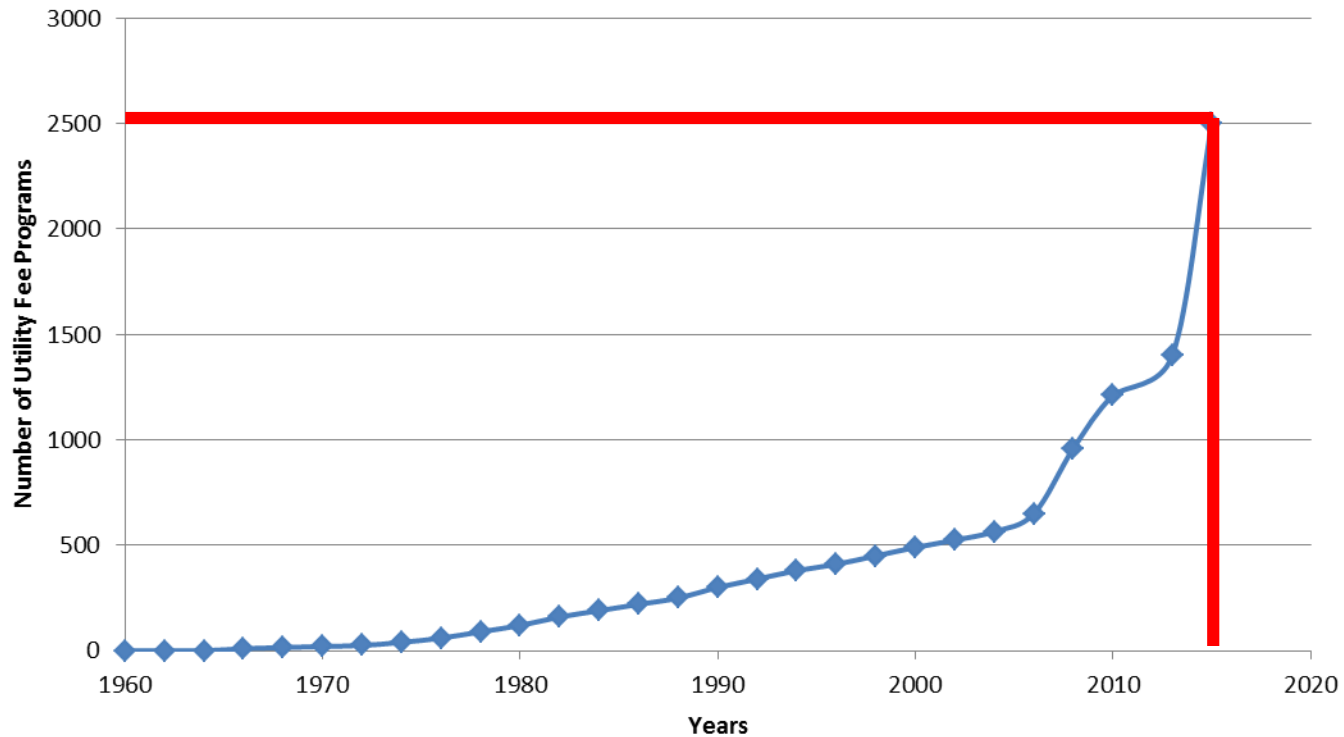
- **Immediate Construction of Small Drainage Projects.** Currently there are over 50 small drainage projects that have been designed and awaits construction, however funds are not available.
- **Immediate Stormwater Related Maintenance Activities.** Realistic scheduling of vegetation control, storm pipe and structure cleaning, street sweeping, and detention pond cleaning.
- **Ability to Bond Larger Stormwater Projects.**
- **Funding for Emergency Stormwater Projects.** Wrightsboro Road Cave-in/Sinkholes, Mims Road Cave-in/Collapse, Birdwell Road Washout/Collapse, Patterson Bridge Road Sinkhole Collapse, Colony Park Culvert Collapse, etc.
- **Generate a Stream of Revenue just for Stormwater Infrastructure.** For the past three (3) years no funding through the General Budget has been budgeted for Infrastructure. SPLOST is currently the only source of revenue which is unstable and competitive with other City Departments and Organizations.
- **Improve Appearance of Augusta, GA.**
- **Revenue for Expansion of Existing Stormwater Infrastructure.** Cyber Command and other Industries.

Estimated Number of Stormwater Utility Fee Programs Created Over Time in the United States



PRESENTED IN FALL 2012

Estimated Number of Stormwater Utility Fee Programs Created Over Time in the United States



PRESENTLY -2015

SURROUNDING MUNICIPALITIES THAT HAVE IMPLEMENTED A STORMWATER UTILITY FEE

1. Americus, GA
2. Athens-Clarke County, GA
3. Atlanta, GA
4. Auburn, GA
5. Austell, GA
6. Avondale Estates, GA
7. Barrow County, GA
8. Braselton, GA
9. Camilla, GA
10. Canton, GA
11. Cartersville, GA
12. Chamblee, GA
13. Clayton County, GA
14. College Park, GA
- 15. Columbia County, GA (Increased their Fee in 2014)**
16. Conyers, GA
17. Covington, GA
18. Decatur, GA
19. DeKalb County, GA
20. Doraville, GA
21. Douglasville-Douglas County, GA
22. Duluth, GA
23. Dunwoody, GA
24. Evans, GA
25. Fairburn, GA
26. Fayette County, GA
27. Fayetteville, GA
28. Garden City, GA

29. Gilmer County, GA
30. Griffin, GA
- 31. Grovetown, GA (Implemented Fee in 2014)**
32. Gwinnett County, GA
33. Henry County, GA
34. Hinesville, GA
35. Holly Springs, GA
36. Lawrenceville, GA
37. Loganville, GA
38. McDonough, GA
39. Norcross, GA
40. Peachtree City, GA
41. Perry, GA
42. Powder Springs, GA
43. Rockdale County, GA
44. Roswell, GA
45. Smyrna, GA
46. Snellville, GA
47. Stockbridge, GA
48. Stone Mountain, GA
49. Sugar Hill, GA
50. Valdosta, GA
51. Warner Robins, GA
52. Woodstock, GA
- 53. North Augusta, SC (Increased their Fee in 2014)**
54. Aiken, SC

GEORGIA STORMWATER COMPARISON THROUGH A SURVEY

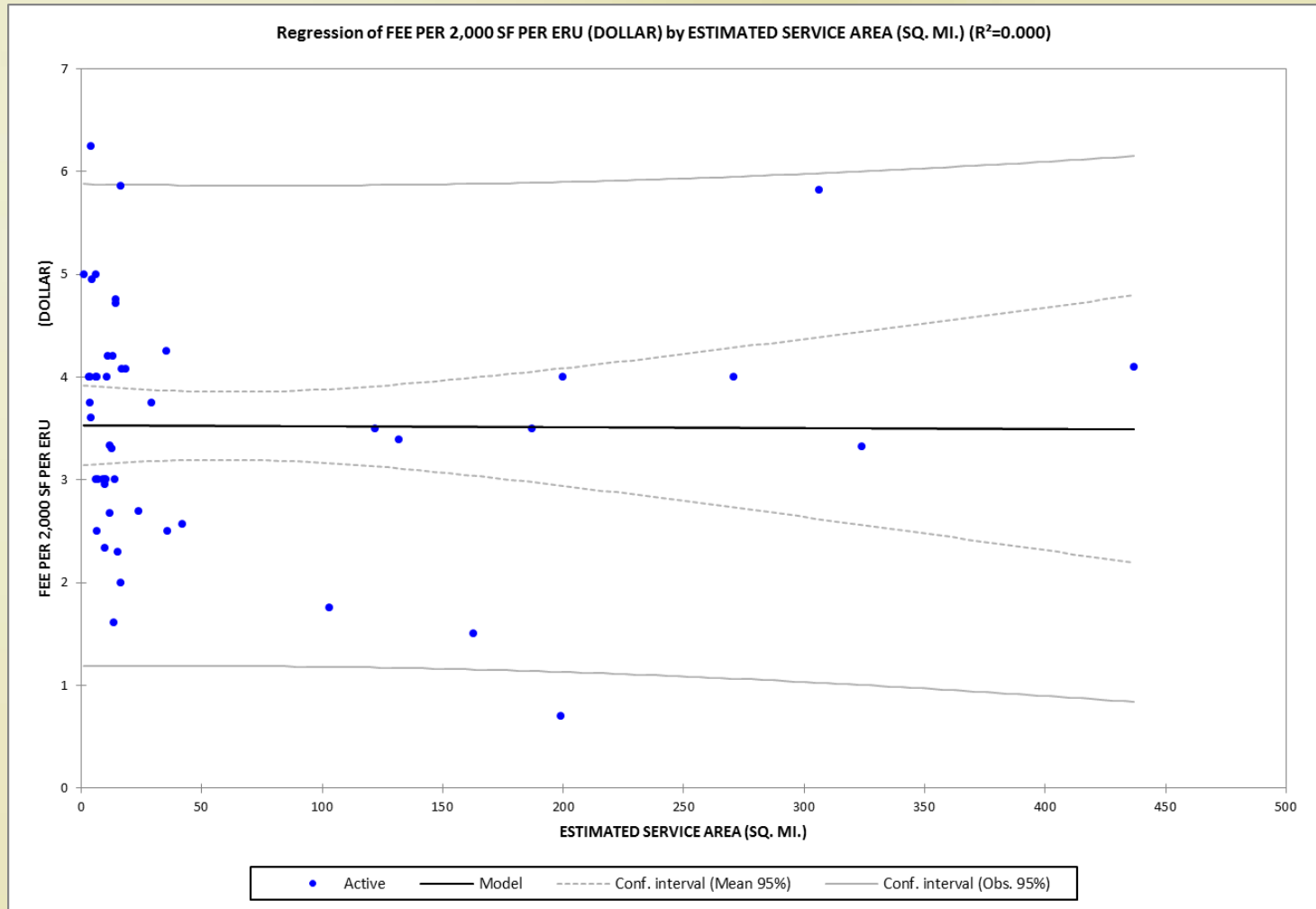
	POPULATION	Fee/Month	Revenue Generated	Service Area	Storm Sewer Pipes	Storm Structures	Ditches	Detention Ponds (Maintained)
Augusta, GA	197,872	\$6.40	\$12,000,000	306.60	1,000	35,000	731	215
Gwinnett County, GA	859,304	\$6.15	\$30,000,000	349.00	1,386	59,996	685	231
Rockdale County, GA	86,919	\$3.39	\$2,000,000	120.00	121	4,705	101	30
City of Valdosta, GA	54,518	\$2.50	\$1,200,000	36.00	188	8,408	43	21

Stormwater Infrastructure Inventory is Approximately 75% Completed.

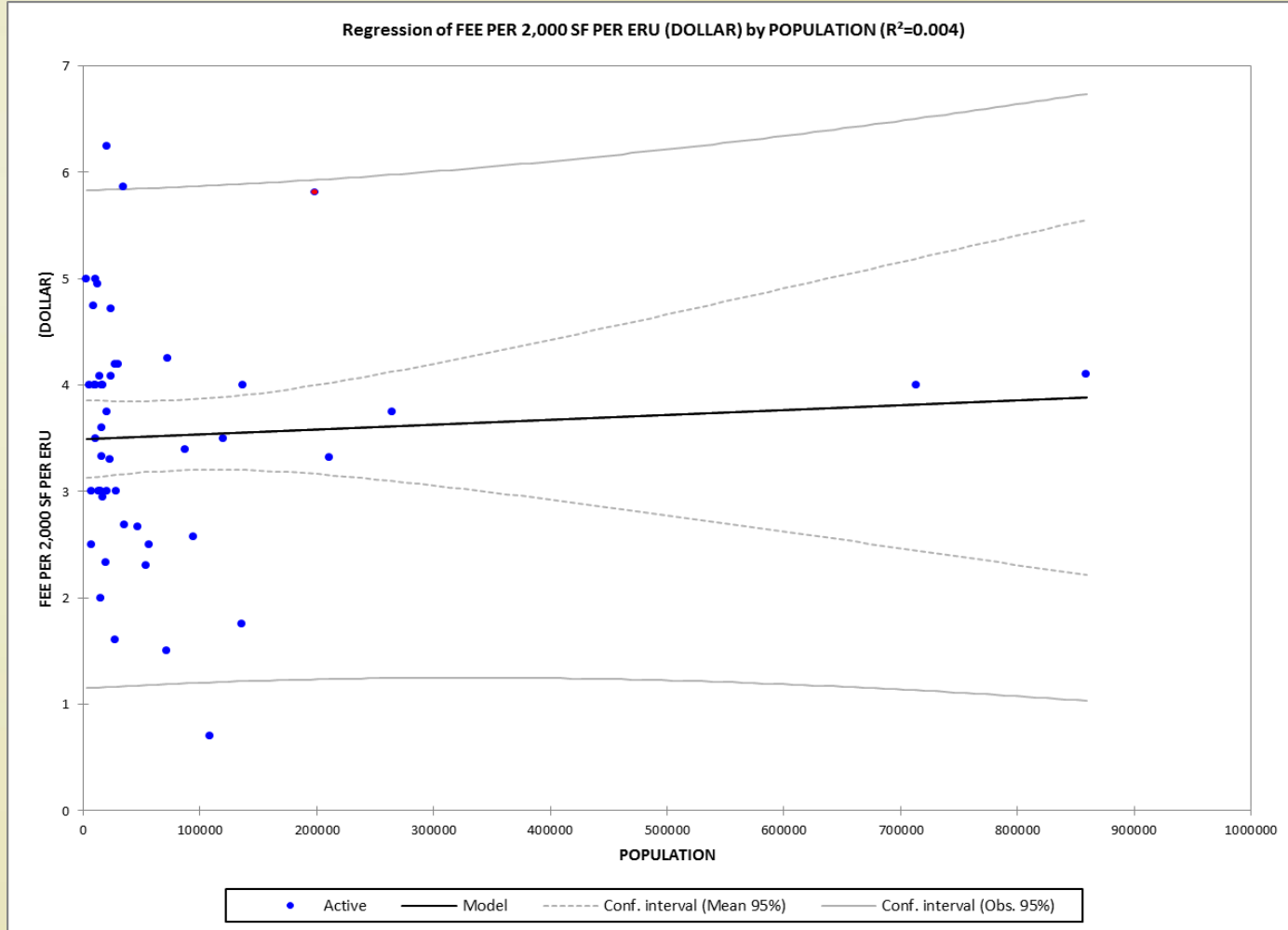
Factors that Should be Considered for a better Comparison:

- 1) Number of parcels (residential, commercial, and industrial)
- 2) Number stormwater structures maintained and how often it is maintained.
- 3) Other funding sources (e.g., SPLOST, General Funds, permit fees, etc.)
- 4) **Service Area.**
- 5) Level of Service.
- 6) Percentage and amount of stormwater budget for administration, planning, CIP projects, maintenance, etc.

GEORGIA STORMWATER COMPARISON THROUGH A SURVEY



GEORGIA STORMWATER COMPARISON THROUGH A SURVEY



“There are no cookbook solutions when designing a stormwater utility. Each community must make its own recipe from a list of possible ingredients...”

*Quoted from the New England Environmental Finance Center
May 2005*

In Summary

1. We have real, growing and unresolved stormwater problems which impact all our citizens
2. We have a reasonable plan comparable to similar local governments to address them over time
3. You will see immediate and measurable benefits throughout the County
4. It will cost about \$15M per year
5. A user fee is the fairest way to cover the cost
6. Those who reduce their impact will receive credits
7. There is wide support for the concept